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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/575,001

04/06/2006

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EXAMINER

PEPITONE, MICHAEL F

ART UNIT

PAPER NUMBER

1796

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/575,001	<b>Applicant(s)</b> UEDA ET AL.	
	<b>Examiner</b> MICHAEL PEPITONE	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 10-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>See Continuation Sheet</u> .                                  | 6) <input type="checkbox"/> Other: _____                          |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :4/30/07, 3/29/07, 3/19/07, 4/6/06.

## **DETAILED ACTION**

### ***Information Disclosure Statement***

The references lined through are duplicates of references listed in a previous Information Disclosure Statement.

### ***Specification***

The specification is objected to under 35 U.S.C. § 112, first paragraph, as failing to provide an adequate written description of the invention. The applicant has failed to incorporate a foreign test standard in the specification.

The incorporation of essential material by reference to a foreign application or foreign patent or to a publication inserted in the specification is improper. Applicant is required to amend the disclosure to include the material incorporated by reference. The amendment must be accompanied by an affidavit or declaration executed by the applicant, or applicants attorney or agent, stating that the amendatory material consists of the same application. *In re Hawkins*, 486 F.2d 569, 179 USPQ 157; *In re Hawkins*, 486 F.2d 569, 179 USPQ 163; *In re Hawkins*, 486 F.2d 569, 179 USPQ 167.

In order to avoid a 35 U.S.C. § 112, first paragraph rejection when the applicant attempts to incorporate a foreign test standard in the specification (see page 3, line 28; page 9, line 7; page 17, line 3; page 18, line 24), it is recommended that the applicant further incorporates the standard in the specification or submit an English translation of the standard.

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***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 11 and 18 are rejected under 35 U.S.C. § 112, first paragraph, for the reasons set forth in the objection to the specification.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 10-15 and 17-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Koleske *et al.* (US 3,734,979).

Regarding claim 10: Koleske *et al.* teaches a composition (1:15-21) comprising a polyolefin {polyethylene} (1:29-37) and cyclic ester polymers {ε-caprolactone, aliphatic polyester} (2:70-3:27; 4:58-5:10); wherein the cyclic ester polymer is contained in an amount 0.25 to 90 wt% and the polyolefin is contained in an amount 99.75 to 10 wt% (6:31-43).

Regarding claim 11: Koleske *et al.* teaches the basic claimed composition [as set forth above with respect to claim 10].

Koleske *et al.* does not teach 3-mm test piece having less than 60% light transmission. The Office realizes that all the claimed effects or physical properties are not positively stated by the reference. However, the reference teaches all of the claimed reagents. Therefore, the

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claimed effects and physical properties, i.e. a 3-mm test piece having less than 60% light transmission, would inherently be achieved by a composition with all the claimed ingredients. If it is the applicants' position that this would not be the case: (1) evidence would need to be presented to support applicant's position; and (2) it would be the Office's position that the application contains inadequate disclosure that there is no teaching as to how to obtain the claimed properties and effects with only the claimed ingredients.

Regarding claim 12: Koleske *et al.* teaches a continuous polyolefin phase (6:51-7:2).

Regarding claims 13-14: Koleske *et al.* teaches a cyclic ester modified with an alkylene oxide (ethylene oxide) {epoxy compounds}, in 70/30 mole ratio {about 14.2 wt% ethylene oxide, as calculated by examiner} (5:46-6:3; 12:30-72), via reaction of alkyleneoxide with active hydrogen containing end groups on the cyclic ester polymer {blocked end group} [instant claim 13-14].

Regarding claim 15: Koleske *et al.* teaches filler (carbon black) (7:9-16), in an amount of 2.6 wt% (19:10-18; Table V).

Regarding claim 17-22: Koleske *et al.* teaches molded products [instant claims 17-22] (1:15-21; 11:11-18).

Claims 24 is rejected under 35 U.S.C. 102(b) as being anticipated by Koleske *et al.* (US 3,734,979).

Regarding claim 24: Koleske *et al.* teaches a method for preparing a moldable composition (1:15-21) comprising a polyolefin {polyethylene} (1:29-37) and cyclic ester polymers {ε-caprolactone, aliphatic polyester} (2:70-3:27; 4:58-5:10); wherein the cyclic ester

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polymer is contained in an amount 0.25 to 90 wt% and the polyolefin is contained in an amount 99.75 to 10 wt% (6:31-43); wherein the polyolefin {low density polyethylene, Melt Index of 1.7-2.4; high density polyethylene, Melt Index of 5, or 5-50 (12:71-13:5} and cyclic ester polymer is blended in the molten state {melt mixed} (6:51-7:2).

While the reference does not provide the melt index values for  $\epsilon$ -caprolactone polymer {or the standard used to measure PE Melt Index}, it is the position of the examiner that the 0.1 to 10 ratio of the melt flow index of the polymers {measured at 190 °C with a load of 21.2 N, would be satisfied when the various polyethylenes and polycaprolactone polymers.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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Claims 16 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over by Koleske *et al.* (US 3,734,979) as applied to claim 10 above, and further in view of Yamada *et al.* (WO 03/022927). For the purpose of examination, Yamada *et al.* (US 7,173,080) was used as the English translation of Yamada *et al.* (WO 03/022927).

Regarding claims 16 and 23: Koleske *et al.* teaches the basic claimed composition [as set forth above with respect to claim 10].

Koleske *et al.* does not teach 0.05 to 30 parts by mass of a swellable layered silicate as filler. However, Yamada *et al.* teaches biodegradable polyester molding compositions (1:9-20; 3:66-4:15) comprising 0.1 to 20 parts by weight of a phyllosilicate {swellable clay} [instant claim 16] (4:19-44; 6:13-33). Koleske *et al.* and Yamada *et al.* are analogous art because they are concerned with a similar technical difficulty, namely the preparation of biodegradable polyester molding compositions. At the time of invention a person of ordinary skill in the art would have found it obvious to have combined 0.1 to 20 parts by weight of phyllosilicate {swellable clay}, as taught by Yamada *et al.*, in the invention of Koleske *et al.*, and would have been motivated to do so since Yamada *et al.* suggests that such swellable clay provides a crystalline nucleus agent, thereby increasing crystallization rate and decreasing molding cycle time [instant claim 23] (6:40-54), and is an equivalent alternative means of providing biodegradable polyester molding compositions.

Regarding claim 23: Koleske *et al.* teaches molded products (1:15-21; 11:11-18).

The prior art made of record and not relied upon is considered pertinent to applicants' disclosure. See attached form PTO-892.



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***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL PEPITONE whose telephone number is (571)270-3299. The examiner can normally be reached on M-F, 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Eashoo can be reached on 571-272-1197. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Eashoo, Ph.D./  
Supervisory Patent Examiner, Art Unit 1796  
13-Sep-08

MFP  
9-September-08